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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,002	09/23/2005	Mugihei Ikemizu	2936-0249PUS1	1240
2292 7590 10/29/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER				
CORMIER, DAVID G				
ART UNIT		PAPER NUMBER		
4132				
NOTIFICATION DATE		DELIVERY MODE		
10/29/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

# Office Action Summary

**Application No.**

10/550,002

**Applicant(s)**

IKEMIZU ET AL.

**Examiner**

DAVID CORMIER

**Art Unit**

4132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/88)  
Paper No(s)/Mail Date See Continuation Sheet
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

Continuation of Attachment(s) 3. Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :20080401, 20070504, 20060713, 20050923.

## **DETAILED ACTION**

### ***Specification***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because it exceeds 150 words.

Correction is required. See MPEP § 608.01(b).

3. The abstract of the disclosure is objected to because there is legal phraseology such as "means." Correction is required. See MPEP § 608.01(b).

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Inventorship***

6. Claims 1-8 are directed to an invention not patentably distinct from Claims 8-13 of commonly assigned U.S. Patent Application No. 10/535247. Specifically, U.S. Patent Application No. 10/535247 claims a washing machine with an ion eluting device, where the washing machine corrects for imbalances in the same way as in the instant application. As explained in further detail below in the double patenting rejections section, Claims 1-8 are held to be obvious with respect to the conflicting application.
7. The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned U.S. Patent Application No. 10/535247, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.
8. A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

### ***Double Patenting***

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

10. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

11. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims 1-4 are provisionally rejected on the ground of nonstatutory obviousness-

type double patenting as being unpatentable over Claims 8-13 of copending Application No. 10/535247. Although the conflicting claims are not identical, they are not patentably distinct from each other because the structure claimed in Claim 1 of Application 10/550002 is claimed in the conflicting application. Although not all parts claimed in this application are explicitly claimed by the conflicting application, they are impliedly present in those claims of the conflicting application.

13. Regarding Claim 1, 10/550002 claims a washing machine comprising a laundry tub with the following structure: ion eluting means for eluting ions and adding them to water, sensing means for sensing imbalance at the time of the rotation of the tub, and imbalance correcting means for correcting the imbalance. The specification of

10/550002 gives examples as to what could constitute each part of the apparatus; Examiner is interpreting the parts of the apparatus as follows: ion eluting means (pages 25, 72) as electrodes, sensing means (page 37) as a touch sensor, and imbalance correction means (page 38) as a controller.

14. Regarding Claim 1, 10/535247 does not explicitly claim an ion eluting means. It does, however, claim a washer, where antimicrobial metal ions can be added to the water (Claim 8). This implies a structure for eluting metal ions must be present to perform the function. The specification of 10/535247 discloses that an ion elution unit comprising metal electrodes immersed in water is used to elute ions to the water (Figure 1, part 100; page 19, lines 4-10), which corresponds to the ion eluting means of 10/550002.

15. Regarding Claim 1, 10/535247 does not explicitly claim a sensing means for sensing imbalance. It does, however, claim that the "uneven spreading of laundry is detected" (Claim 8). This implies a structure for sensing imbalance must be present to detect the uneven spreading. The specification of 10/535247 discloses that a touch sensor can be used to detect vibration from uneven spreading of laundry (page 38; lines 1-3), which corresponds to the sensing means of 10/550002.

16. Regarding Claim 1, 10/535247 does not explicitly claim an imbalance correction means for correcting imbalance. It does, however, claim that there is a "countermeasure" (Claims 8-13) for correcting uneven spreading of laundry, where the countermeasure acts in response to the detection of uneven spreading of laundry and performs different balance correction depending on whether ions have been supplied or

not. This implies that the countermeasure includes a controller or microprocessor. The specification of 10/535247 discloses that a controller sends commands to a drive unit (Figure 1, part 80; page 11, line 24; page 12, lines 1-3), which corresponds to the imbalance correction means of 10/550002.

17. Regarding Claim 1, the claimed "imbalance correcting means" is considered to be claimed by 10/535247. The basis for this assertion is that the controller of 10/535247 can perform two functions, such as rinsing for correcting uneven spreading of laundry by agitating it in water containing metal ions (Claim 9) and correcting uneven spreading of laundry by agitating it in rinsing water with pouring water containing no metal ions (Claim 11). This indicates that the microprocessor of 10/535247 is programmed to perform two different tasks as in Claim 1 of 10/550002.

18. Claim 2 of 10/550002 claims a balance correction rinsing in which the metal ion added water is supplied to the laundry tub and agitation is performed. Claim 9 of 10/535247 claims rinsing for correcting uneven spreading of laundry by agitating it in water containing metal ions.

19. Claim 3 of 10/550002 has balance correction rinsing where the amount of metal ions supplied in a latter step can be less than in the preceding step, which is claimed in Claim 10 of 10/535247 when it claims to perform a rinsing for correcting uneven spreading of laundry, where the amount of metal ions added is less than in a previous process.

20. Since the implied claim scope in 10/535247 is shown to be based on examples whose corresponding claim elements are identical to the claim scope in this application,



10550002, the conclusion of anticipatory obviousness-type double patenting is warranted. In effect, the claims in 10/535,247 fully anticipate the claims in this application.

21. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

22. Claims 5-7 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claims 8-13 of copending Application No. 10/535247. Although the conflicting claims are not identical, they are not patentably distinct from each other because Claims 5-7 of 10/550002 claim the washing machine where the laundry tub is a drum disposed so that a rotation axis thereof is at an angle with respect to a vertical direction. Since the drum could be at any angle, including an angle of zero degrees, and Claim 8 of 10/535247 includes a washing tub that must exist at some angle, Claims 5-7 of 10/550002 are anticipated by the subgenus of rotation axis of Claims 8-13 of 10/535247.

23. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 112***

24. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

25. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

26. Regarding Claim 1, it is unclear whether the claimed “imbalance correction means” must perform both the “processing different” and the “processing,” or only the “processing different.”

27. Regarding Claim 1, claim element “imbalance correcting means” is a means (or step) plus function limitation that invokes 35 U.S.C. 112, sixth paragraph. The written description only implicitly or inherently sets forth the corresponding structure, material, or acts that perform the claimed function. The imbalance correcting means is disclosed as possibly being a microprocessor or controller, as well as other means of correction; however, a microprocessor cannot physically effect the described actions without being connected to an actuator. Hence, it is unclear what is being claimed. More generally, pursuant to 37 CRF 1.75(d) and MPEP 608.01(o) and 2181, applicant is required to:

(a) Amend the claim so that the claim limitation will no longer be a means (or step) plus function limitation under 35 U.S.C. 112, sixth paragraph; or

(b) Amend the written description of the specification such that it expressly recites the corresponding structure, material, or acts that perform the claimed function and clearly links or associates the structure, material, or acts to the claimed function, without introducing any new matter (35 U.S.C. 132(a)); or

(c) State on the record what the corresponding structure, material, or acts, which are implicitly or inherently set forth in the written description of the specification, perform the claimed function.

28. Regarding Claims 5-8, it is unclear whether the claimed “at an angle” necessarily requires a finite, non-zero value for the angle.

29. Regarding Claim 3, it is unclear what is meant by the phrase "an amount of supply . . . so as to be smaller than an amount of supply of." It is unclear whether the amounts to be compared and determined to be smaller refer to absolute number of ions as determined, for example, by grams of metal added to water during the respective operations, ion concentrations during respective operations, both, or some other aspect of measure for comparison.

***Claim Rejections - 35 USC § 103***

30. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

31. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

32. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Utility-Model Application No. 151219/1979 (Laid-open No. 69372/1981) (Tokyo

Shibaura Electric Co., Ltd.), hereinafter referred to as "TSE 151219/1979," in view of *Ando et al* (JP 2001-276484).

33. Applicant claims a washing machine comprising a laundry tub in which laundry is put, which has ion eluting means for eluting metal ions, sensing means for sensing imbalance, and imbalance correcting means for correcting the imbalance, which performs an imbalance correction processing different from a processing performed when imbalance is sensed in a case where the metal ion added water is not supplied. Applicant is using means plus function language to claim the apparatus. The specification gives examples as to what could constitute each part of the apparatus; Examiner is interpreting the parts of the apparatus as follows: ion eluting means (pages 25, 72) as electrodes, sensing means (page 37) as a switch that detects when the rotating drum is vibrating abnormally and a storage element that receives the vibration detection signal, and imbalance correction means (page 38) is done manually.
34. TSE 151219/1979 discloses a washing machine with a drum for holding laundry, which has sensing means consisting of a switch (Figure 1, part 8) that detects when the rotating drum is vibrating abnormally and a storage element that receives the vibration detection signal (Figure 1, part 13). When an imbalance is detected in the spin cycle after a processing agent is supplied, imbalance is corrected manually, unlike in cases when the imbalance is detected before the processing agent is supplied (Page 1, lines 17-20; page 2, lines 1-3).
35. TSE 151219/1979 does not explicitly disclose an ion eluting means.

36. *Ando et al* discloses a washing machine with an ion eluting means, namely silver electrodes for electrolytically adding silver ions to water for its antibacterial effects (machine translation, abstract; paragraphs 1-6).

37. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teaching of TSE 151219/1979, as taught by *Ando et al*, and to add the capability of eluting metal ions to the washer of TSE 151219/1979, where the metal ions are the "processing agent." One would have been motivated to do so in order to receive the expected benefit of having the antibacterial effect.

38. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Hird* (WO 01/071084) in view of *Ando et al* (JP 2001-276484).

39. Claim 1 is to a washing machine with a laundry drum, an ion eluting means, a sensing means and an imbalance correction means.

40. Regarding the means plus function language of Claim 1, Examiner is interpreting the parts of the apparatus as follows: ion eluting means (pages 25, 72) as electrodes, sensing means (page 37) as a sensor which monitors the value of the mains supply voltage and a tachometer which monitors the speed of a motor, and imbalance correction means (page 38) as a controller and control software.

41. Regarding Claim 1, *Hird* discloses a washing machine with a laundry drum (Figure 1, part 50; page 3, lines 29-30), which is provided with a sensing means ("a sensor which monitors the value of the mains supply voltage and a tacho T which monitors the speed of motor M") for detecting imbalances in the textiles (Figure 2, part T; page 6, lines 8-10), and imbalance correcting means ("controller" and "control

software") for controlling an imbalance correction operation (Figure 2, parts 100 and 105; page 6, lines 1-2 and 23-27).

42. *Hird* does not explicitly disclose an ion eluting means.

43. *Ando et al* discloses a washing machine with an ion eluting means, namely silver electrodes for electrolytically adding silver ions to water for its antibacterial effects (machine translation, abstract; paragraphs 1-6).

44. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teaching of *Hird*, as taught by *Ando et al*, and to add the capability of eluting metal ions to the washer of *Hird*. One would have been motivated to do so in order to receive the expected benefit of having the antibacterial effect.

45. The claimed "imbalance correcting means" of Claim 1 is considered to be taught by *Hird*. The basis for this assertion is that the microprocessor of *Hird* can perform two functions, such as rotating the drum at a speed of 83 rpm to redistribute the load (page 7, lines 15-16) and rotating different segments of the drum at different velocities (page 8, lines 21-23). This indicates that the microprocessor of *Hird* is programmed to perform two different tasks as in Claim 1.

46. The conditional limitations of the claimed imbalance correction means of Claim 1, and the use of the washing machine in Claims 2-4 are regarded as intended use of the washing apparatus as taught by *Hird* and *Ando et al* and are not further limiting in so far as the structure of the apparatus is concerned. The claimed intended use must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. The washer of *Hird* and

*Ando et al* is capable of performing balance correction rinsing, of supplying different quantities of water or ions, and of agitating the laundry load.

47. Claims 5-8 require a drum (*Hird* Figure 1, part 50) disposed so that a rotation axis thereof is at an angle with respect to the vertical direction. *Hird* in view of *Ando et al* does not expressly disclose tilting the washing drum so that a rotation axis is at an angle with respect to a vertical direction. Nevertheless, the rotation axis would be expected to inherently possess some angle with respect to the vertical, even if it is an angle of zero degrees.

***Examiner's Note***

48. The use of Japanese Utility-Model Application No. 151219/1979 (Laid-open No. 69372/1981), regarding Claim 1, is based upon an oral translation. A written translation has been ordered from Translations Branch.

**CONCLUSION**

49. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID CORMIER whose telephone number is (571)270-7386. The examiner can normally be reached on Monday - Thursday 7:30 - 5:00.

50. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Lavilla can be reached on (571)272-1539. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

51. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DGC/

**/Michael La Villa/  
Michael La Villa  
Supervisory Patent Examiner, Art Unit 4132  
27 October 2008**